

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,175	02/18/2004	Michael R. Oldenburg	6919.03	1818
7590 09/08/2005			EXAMINER	
S. Wade Johnson DORSEY & WHITNEY LLP Intellectual Property Department 50 South Sixth Street, Suite 1500			PATEL, VISHAL A	
			ART UNIT	PAPER NUMBER
			3673	
Minneapolis, N	лN 55402-1498		DATE MAILED: 09/08/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/781,175	OLDENBURG, MICHAEL R.				
Office Action Summary	Examiner	Art Unit				
	Vishal Patel	3679				
The MAILING DATE of this communication app						
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,						
WHICHEVER IS LONGER, FROM THE MAILING DATE of the may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period was a Failure to reply within the set or extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a , cause the application to become ABANDONED	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 01 Ju	ıne 2005.					
2a) This action is <b>FINAL</b> . 2b) This	·					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-53 is/are pending in the application.	4)⊠ Claim(s) <u>1-53</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-53</u> is/are rejected.	3)⊠ Claim(s) <u>1-53</u> is/are rejected.					
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
	1. ☐ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
222 ms amazinea actualisa actual de la						
Attachment(s)						
1) Motice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date 6)						

Art Unit: 3679

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2. Claims 1-53 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon "the protrusion is displaceable", how can this form a seal?
- 3. Claims 1-53 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for protrusions that are contacting the housing in relation to the sleeve, does not reasonably provide enablement for protrusion that are displaceable with respect to the housing and the sleeve. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected.
- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-53 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear when applicant claims that the protrusion is displaceable, this is not described in the specification. Furthermore how can this be considered to be a seal? i.e, see claim 1, line 14 and claim 5, line 3.

Application/Control Number: 10/781,175

Art Unit: 3679

# Double Patenting

Page 3

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-9, 20-30, 34-47 and 53 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,186,507. Although the conflicting claims are not identical, they are not patentably distinct from each other because as noted in claim 1 of the US patent 6,186,507, a sleeve having a portion that is parallel to a shaft axis, a radial portion that is perpendicular to the parallel portion, a housing having a radial portion, a parallel portion that is parallel to the axis of the shaft, a faceplate, a first elastomeric protrusion (face lips) extending radially between the radial portion of the sleeve and the face plate, a second elastomeric protrusion (the perimeter lip that is attached to the housing) that is attached to the housing and contacting the sleeve parallel portion, a third elastomeric sealing lip contacting the parallel portion of the sleeve (main lip that has a garter spring), a lip (perimeter lip) that is secured to the sleeve and contacting the housing, the first elastomeric portion has an acute undercut angle (under cut angle of the face lip as claimed in claims 5-6), the first elastomeric protrusion is attached to the sleeve and contacts the faceplate, the second elastomeric lip of claim 31 (the second face lip as mentioned in claim 1 of the US.

Application/Control Number: 10/781,175

Art Unit: 3679

Patent), an elastomeric coating on an outer surface of the housing and/or an outer surface of the sleeve (see claim 12 of US. Patent), as to claims 38-45 (the main lip and the perimeter lip) and as to claim 53 (see claim 2 of US. Patent).

Page 4

- 8. Claims 10-19 and 48-52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,186,507 in view of Seeh et al (US. 5,096,207). The US. Patent 6,186,507 discloses the invention substantially as claimed above but fails to disclose that the second elastomeric protrusion is made of a triple lip having a garter spring. Sheed teaches to have a housing having a triple lip having a garter spring. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the second elastomeric protrusion of US. 6,186,507 to have triple lip as taught by Sheed, to provide triple seal and further improve sealing between the casing and the housing (see column 2, lines 40-47 of Seeh).
- 9. Claims 1-30 and 34-53 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 and 37-10 of U.S. Patent No. 6,406,026. Although the conflicting claims are not identical, they are not patentably distinct from each other because as noted in the US. Patent 4,406,026 a seal having a sleeve having a portion that extends from a parallel portion that is parallel to a shaft axis (sleeve and flange of claim 2), an outer housing having a portion that extends radially toward the shaft axis, a portion that is parallel to the shaft axis and a faceplate portion that extends toward the shaft axis, a perimeter lip (lip that extends outwardly from the radial portion of the sleeve), an elastomeric protrusion (at least one flexible member that contacts the faceplate) that contacts the faceplate

Art Unit: 3679

portion of the housing and is attached to the sleeve, the main lip has a garter spring and is a triple lip (shows three lips that contact the parallel portion of the sleeve).

# Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 11. Claims 1-19, 22-23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanda US. 5,649,710).

Regarding claim 1: Kanda discloses a seal for sealing a shaft, the seal comprising a sleeve constructed to be disposed generally coaxially around the shaft (sleeve 12) and comprising a parallel sleeve portion (sleeve portion that contacts the shaft 18) that is generally parallel to the longitudinal axis of the shaft and a radially extending sleeve portion (portion having 70) that extends generally radially away from the longitudinal axis of the shaft, an outer housing (housing that surrounds the sleeve) configured to generally surround the sleeve and comprising a parallel housing portion (portion 46 and 16) that is generally parallel to the longitudinal axis of the shaft, a radially extending housing portion that extends generally radially towards the longitudinal axis of the shaft (52), and a faceplate portion (66) that extends generally radially towards the longitudinal axis of the shaft, a first elastomeric protrusion (70) extending generally between the radially extending sleeve portion and the faceplate portion and including a base and an end

generally opposite the base and oriented generally radially towards the longitudinal axis of the shaft and a second elastomeric protrusion (60) including a base secured to the housing and an end generally opposite the base and displaceable (capable of being displaced) against the sleeve, wherein the end is oriented generally radially away from the longitudinal axis of the shaft (the end of 60 is oriented generally radially away from the longitudinal axis of the shaft). All the elastomeric protrusions are capable of being displaceable.

Regarding claim 2: The base of the second elastomeric protrusion is secured to the radially extending housing portion (60 is attached to 52).

Regarding claim 3: The end of the second elastomeric protrusion is displaceable against the radially extending sleeve portion (60 contacts 32, which is the radially extending portion of the sleeve).

Regarding claim 4: The end of the second elastomeric protrusion is oriented generally both radially away from the longitudinal axis of the shaft and axially outward (60 is oriented generally axially outward of the longitudinal axis of the shaft).

Regarding claim 5: The seal having a third elastomeric protrusion including a base secured to the housing and an end generally opposite the base and displaceable (capable of being displaced) against the sleeve.

Regarding claim 6: The end of the third elastomeric protrusion is displaceable against the parallel sleeve portion (the third lip is capable of being displaceable).

Regarding claim 7: The base of the third elastomeric protrusion is secured to the radially extending housing portion (the third elastomeric protrusion is secured to the radial portion of the housing).

Application/Control Number: 10/781,175

Art Unit: 3679

Regarding claim 8: The third elastomeric protrusion (protrusion being 82) is oriented generally axially outward.

Regarding claim 9: The end of the third elastomeric protrusion is oriented generally axially inward (protrusion being 76).

Regarding claim 10: The seal having a forth elastomeric protrusion (protrusion 76) including a base secured to the housing and an end generally opposite the base and displaceable against the sleeve.

Regarding claim 11: The end of the fourth elastomeric protrusion is displaceable against the parallel sleeve portion.

Regarding claim 12: The base of the fourth elastomeric protrusion is displaceable against the radially extending housing portion.

Regarding claim 13: The end of the fourth elastomeric protrusion is oriented generally axially outwardly (the fourth elastomeric protrusion 76 is extended outwardly of the longitudinal axis of the shaft).

Regarding claim 14: The end of the fourth elastomeric protrusion is oriented generally axially inward (the fourth elastomeric protrusion is 74 and the third elastomeric protrusion is 82).

Regarding claim 15: The seal having a fifth elastomeric protrusion including a base secured to the housing and an end generally opposite the base and displaceable against the sleeve (the fifth protrusion is 74).

Regarding claim 16: The end of the fifth elastomeric protrusion is displaceable against the parallel sleeve portion.

Regarding claim 17: The base of the fifth elastomeric protrusion is secured to the radially extending housing portion.

Regarding claim 18: The end of the fifth elastomeric protrusion is oriented axially inward (74 is oriented axially inward).

Regarding claim 20: The seal having a third elastomeric protrusion including a base secured to the radially extending sleeve portion and an end generally opposite the base and displaced against the housing, wherein the end is oriented both generally radially away from the longitudinal axis of the shaft and axially outwardly (third protrusion at the distal end of 36).

Regarding claim 21: The end of the third elastomeric protrusion is displaceable (capable of being displaced) against the parallel housing portion (the third elastomeric protrusion is capable of being displaced).

Regarding claims 22-23: The first elastomeric protrusion has an acute undercut angle (the acute angle on the surface of 70).

Regarding claim 24: The base of the first elastomeric protrusion is secured to the radially extending sleeve portion. The first elastomeric protrusion is extended axially and radially in relation to the longitudinal axis of the shaft.

Regarding claim 25: The first elastomeric protrusion is configured and oriented to guide inward traveling debris from the end of the first elastomeric protrusion toward the base of the first elastomeric protrusion.

Regarding claim 26: see claims 1 and 20 above.

Regarding claim 27-28: see claims 22-23 above.

Regarding claim 29: see claim 24 above.

Art Unit: 3679

Regarding claim 30: see claim 25 above.

Regarding claims 31-33: see claims 2-4 above.

Regarding claim 34: The seal having an elastomeric coating on an outer surface of the housing and/or an outer surface of the sleeve (outer coating 54 and 44).

Regarding claim 35: see claim 21 above.

Regarding claim 36: The faceplate portion comprises a parallel faceplate portion (parallel portion 66) that is generally parallel to the longitudinal axis of the shaft and a front cover portion (66) that extends generally radially toward the longitudinal axis of the shaft from the parallel portion.

Regarding claim 37: The faceplate portion further comprises a third portion (16) that extends generally radially towards the longitudinal axis of the shaft from the parallel faceplate portion.

Regarding claims 38-42: see claims 5-9 above (the third protrusion is the fourth protrusion).

Regarding claims 43-47: see claims 10-14 above (the fourth protrusion is the fifth protrusion).

Regarding claims 48-51: see claims 15-18 above (the fifth protrusion is the sixth protrusion).

### Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 19 and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda in view of Sekullch (US. 3,572,732).

Kanda discloses the invention substantially as claimed above but fails to disclose that the fifth lip has a garter spring. Sekullch teaches to have a lip seal to have a garter spring or not to have a garter spring. Furthermore Sekullech teaches to have a dust lip connected to a faceplate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the fifth lip and the faceplate of Kanda to have a garter spring and a fourth protrusion, respectively as taught by Sekullch, since having a garter spring or not to have a garter spring is considered to be art equivalent and to prevent dust from entering an environment that is sealed (see Sekullech).

## Response to Arguments

14. Applicant's arguments with respect to claims 1-53 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

August 30, 2005

Vishal Patel

Patent Examiner Tech. Center 3600